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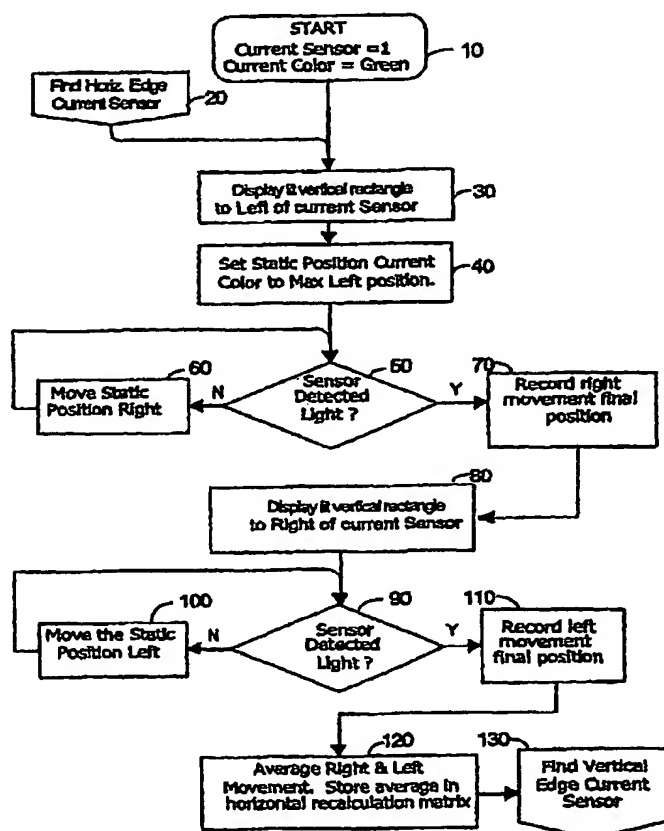
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[Continued on next page]

(54) Title: **CENTER CONVERGENCE OPTIMIZATION IN A PROJECTION DISPLAY APPARATUS**



(57) Abstract: Progressive rounding error and convergence error encountered due to multiple use of a center correction adjustment (820) of an image of a video projection display is reduced by calculating a 3 x 3 matrix (770) for a moved color signal where the non center matrix values represent the difference between the initially measured sensor values (Si1,...,Si8) stored at initial alignment (720), and stored most recently measured sensor values (Sp1,...,Sp8). The matrix center value (860) is the sum of the averaged values calculated from the edge center errors, the stored sum of previous moves (MS) and the current move (CP). Rerun of the sensor finding routine (745) resets the stored move sum to zero.



SE, SI, SK, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

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# INTERNATIONAL SEARCH REPORT

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## A. CLASSIFICATION OF SUBJECT MATTER

IPC(7) : H04N 9/28

US CL : 348/807

According to International Patent Classification (IPC) or to both national classification and IPC

## B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

U.S. : 348/807, 806, 189-191, 511, 745, 747; 315/368.11-368.13

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)  
EAST

## C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	US 5,969,756 A (BUCKLEY et al) 19 October 1999 (19.10.1999), column 2, line 35 - col. 3, line 62.	1, 10, 15 and 21
A	US 5,159,436 A (SONEIRA) 27 October 1992 (27.10.1992), column 3, line 1 - column 4, line 8.	1, 10, 15 and 21
A	US 6,219,011 B1 (ALONI et al) 17 April 2001 (17.04.2001), column 1, line 20 - column 3, line 5.	1, 10, 15 and 21
A	US 4,857,998 A (TSUJIHARA et al) 15 August 1989 (15.08.1989), column 3, lines 25-68.	1, 10, 15 and 21

☐ Further documents are listed in the continuation of Box C.

☐ See patent family annex.

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document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art

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document member of the same patent family

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